REMARKS

<u>Claim Status</u>

Claims 1-8 remain pending in the present application.

Claim 3 has been amended in an editorial manner, and not in response to the cited art or any formal defect. For example, claim 3 has been amended to reposition a comma. Claim 8 has been amended to direct its scope to a different aspect of the invention, and again, not in response to the cited art or any formal defect. For example, claim 8 is now directed to a "composite map" instead of a "database".

Claims 1-8 stand rejected as being unpatentable over Moskowitz (U.S. Patent No. 5,889,868) in view of Mauney (U.S. Patent No. 5,214,757).

Applicants respectfully traverse these rejections.

Claim 1 in view of Moskowitz and Mauney

Applicants respectfully submit that the proposed combination of Moskowitz and Mauney is improper. For example, there is no reasonable expectation of success in combining the techniques of Moskowitz and Mauney as suggested by the Office (see, e.g., MPEP 2142). In fact, Mauney teaches away from using their annotation techniques with imagery (e.g., aerial photographs), by suggesting that such imagery is ill suited for their techniques (see Col. 2, lines 18-22). For that matter while Moskowitz may contemplate watermarking images, its disclosure is silent regarding image data acquired from a satellite-imaging platform. The cited Moskowitz passage at Col. 6, lines 9-45 deals with content transmission (e.g., using a satellite is a transmission channel) instead of an image data acquisition platform.

The combination is deemed improper.

Nevertheless, even if combined as proposed by the Office, such a combination fails to teach or suggest each of the claim features as presently combined in claim 1.

Moskowitz fails to teach watermarking image data acquired by a satellite, and then watermarking a map generated from a database including the watermarked image data, in combination with the remaining claim 1 features.

Indeed, the cited passages (e.g., Moskowitz at Abstract lines 1-8, Col. 2, lines 25-34) only suggest, e.g., that digital watermarks can be optimally suited to a particular transmission, distribution and storage medium, and watermark application parameters can be adapted to individual characteristics of a given digital sample stream.

Respectfully, claim 1 should be allowed.

(Applicants note that the term "imagery" in claim 1 is broadly defined and encompasses other types of imagery besides photographs.).

Claim 2 in view of Moskowitz and Mauney

Applicants respectfully disagree that Mauney teaches generating a digital map from a database containing data from a plurality of aerial sources (see the Office Action at page 3, lines 5-6 of paragraph 4 – citing Mauney at Fig. 1 and Abstract lines 1-11), in combination with the remaining features of claim 2.

Applicants understand Mauney's to teach the collection of data from a single source – a vehicle-mounted GPS receiver.

In comparison, claim 2 recites that a database contains data from a plurality of aerial sources. For example, the database may include data from a first satellite and a second satellite, or from a satellite and an aircraft, or from multiple aircrafts, etc., etc. In some cases the database will be populated directly from the aerial sources; in other cases,

the database may receive the data from a ground station or transmission channel. Regardless, the data is from a plurality of aerial sources.

Respectfully, claim 2 should be allowed.

Other shortcomings of the art need not be belabored herein. Moreover, Applicants again question the propriety of combining Moskowitz and Mauney as proposed in the Office Action.

Claim 3 in view of Moskowitz and Mauney

Moskowitz is not understood to teach or suggest that claim 2's watermarking encodes, or points to, information that is <u>also</u> conveyed with the map in the form of header data, as suggested by the Office (see the Office Action at page 3, lines 2-5 of paragraph 5 – citing Moskowitz's Abstract, lines 1-8 and 15-18; and Col. 2, lines 25-34 and 58-61).

While the cited passages may provide general statements of watermarking (e.g., "watermarks that are optimally suited to particular transmission, distribution and storage mediums . . ." (see col. 2, lines 25-34); "highlight advantageous location for the insertion of digital watermarks . . . " (see col. 2, lines 58-61 and Abstract, lines 15-18); and "Watermark application parameters can be adapted to the individual characterizes of a given digital sample . . ." (see Abstract, lines 1-8)), the cited passages are not understood to teach that the watermarking encodes (or points to) information that is <u>also</u> conveyed with the map in the form of header data. There is no mention of headers in the cited Moskowitz passages, nor is there discussion of information being conveyed with a map both by watermark encoding (or pointed to by the encoding) and header data.

Applicants note with curiosity the Office's statement that "it is also well-known in the art to arbitrarily insert visible as well as invisible watermarks." (See the Office Action at page 3, lines 4-5 of paragraph 5). Applicants fail to see its connection to

information being conveyed with a map both by watermark encoding (or pointed to by the encoding) and header data.

Respectfully, claim 3 should be allowed.

Claim 7 in view of Moskowitz and Mauney

The cited Moskowitz passages (see Office Action at page 4, lines 2-4 of paragraph 9, citing the Moskowitz Abstract, lines 18-21; Col. 2, lines 62-65; and Col. 10, lines 1-10) are not understood to teach or suggest that the watermark of claim 2 is designed to be lost, or degrade predictably, when the map is processed in a particular manner.

In the specification (page 12, line 29 – page 13, line 8) we provide some examples that may fall within the scope of claim 7: "Some watermarks used in the foregoing embodiments can be "fragile." That is, they can be designed to be lost, or to degrade predictably, when the data set into which it is embedded is processed in some manner. Thus, for example, a fragile watermark may be designed so that if an image is JPEG compressed and then decompressed, the watermark is lost. Or if the image is printed, and subsequently scanned back into digital form, the watermark is corrupted in a foreseeable way. .... By such arrangements it is possible to infer how a data set has been processed by the attributes of a fragile watermark embedded in the original data set." (Of course there are many other implementations and examples that will fall within the scope of claim 7. And citing these specification examples should in no way limit the scope of claim 7, or infer that certain terms not specifically recited by claim 7 are in fact incorporated into claim 7.).

Moskowitz, in contrast, discusses a watermark that is resistant to processing in a particular manner. For example, the Moskowitz Abstract suggests that attempts to remove the watermark results in <u>content signal</u> degradation. Moskowitz restates that the <u>content signal</u> (or <u>protected signal</u>) degrades at Col. 2, lines 62-65 and Col. 10, lines 7-8.

The cited passages thus fail to teach that the <u>watermark</u> is <u>designed to be lost, or degrade predictably</u>, when the map is processed in a particular manner, in combination with the features of claim 2.

Claim 7 should be allowed.

Claim 8 in view of Moskowitz and Mauney

Claim 8 has been amended to recite a composite map formed from plural sets of component map data. The composite map is characterized in that the plural sets of component map data each are encoded with a different watermark. Each of the different watermarks encode, or link to, meta data associated with its respective component map data.

The proposed combination of Mauney and Moskowitz is not understood to teach or suggest such an inventive combination. (Applicants must once again object to the proposed combination of Mauney and Moskowitz.). For example, Mauney does not suggest a composite map characterized in that plural sets of component map data <u>are each</u> <u>encoded with a different watermark</u>, where <u>each of the different watermark encode or</u> <u>link to metadata associated with its respective component map</u>. Mauney at the cited Fig. 1 and Abstract lines 1-11 does not teach or suggest such a combination. Moskowitz is also deficient in this regard.

Thus, claim 8 should be allowed.

Remaining Dependent Claims

The remaining dependent claims are believed patentable in their own right, in addition to being patentable by virtue of being dependent upon allowable base claims.

Information Disclosure Statement

Applicants are submitting herewith an Information Disclosure Statement and Form-1449. Consideration of the documents listed on the Form-1449 is respectfully requested.

Conclusion

The application is believed to be in condition for allowance. An early notice of allowance is respectfully requested. (The remaining shortcomings of the art need not be belabored at this time.).

Nevertheless, the Examiner is invited to telephone the undersigned at 503-495-4575 if any issue remains.

Date: April 30, 2003   Respectfully submitted,

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